

U.S. Department of Energy  
Office of River Protection  
Mr. Michael K. Barrett  
Contracting Officer  
P.O. Box 450, MSIN H6-60  
Richland, Washington 99352

CCN: 025088

Dear Mr. Barrett:

**CONTRACT NO. DE-AC27-01RV14136 – TRANSMITTED FOR USE: RESPONSE TO  
OFFICE OF SAFETY REGULATION (OSR) QUESTIONS ON PROPOSED REVISION  
TO THE INTEGRATED SAFETY MANAGEMENT PLAN; ABCN-24590-01-00008**

- References:
- 1) CCN 024293, Letter from R. C. Barr, OSR, to R. F. Naventi, BNI, "Office of Safety Regulation (OSR) Questions on the Revised Integrated Safety Management Plan," 01-OSR-0408, dated October 19, 2001.
  - 2) CCN 023021, Letter from A. R. Veirup, BNI, to M. K. Barrett, ORP, "Transmitted for Approval: Contract Deliverable, Revised Standards Approval Package and Associated Authorization Basis Change Notice ABCN-24590-01-00008, Revision 0, ISMP Standards Approval Package Submittal," dated September 17, 2001.

In response to the Reference 1 transmittal, Bechtel National, Inc. (BNI) is submitting, for the U.S. Department of Energy's (DOE), Office of Safety Regulation (OSR) use, responses to thirty six (36) of the thirty-seven (37) OSR questions. The response to question 01-ISMP-017 is still under development. These questions are in reply to the Authorization Basis Change Notice (ABCN) ABCN-24590-01-00008, Revision 0. That ABCN, as submitted by Reference 2, proposed revisions to the Hanford Tank Waste Treatment and Immobilization Plant (WTP) Project Integrated Safety Management Plan (ISMP). The submittal represented a "revised Standards Approval Package" (SAP) in support of the WTP Project Construction Authorization Request (CAR). The CAR is scheduled to be submitted to DOE on January 14, 2002.

While the revised SAP is anticipated to be approved in full with the approval of the CAR, BNI requested in Reference 2 early approval of portions of the proposed ISMP changes. This request was discussed with Messrs. Miller, Pasciak, and Kaushal of your staff. The OSR questions from Reference 1 reflect a request from DOE for additional information to support review and approval of these requested early approvals, as well as other clarifications.

Responses to the OSR questions, provided in Attachment 1, were solicited from project-wide sources as a function of the question topic. The focus of these responses was to clarify the proposed ISMP changes and, as needed, to propose updates to the proposed changes. For those

proposed changes that require additional ABCN clarification or, in some cases, revision of the original proposed change, a Revision 1 update to the ISMP SAP ABCN will be provided with the CAR submittal.

For that ABCN revision, the Project process of Authorization Basis maintenance, including Project Safety Committee review and recommendation, Project Manager ABCN approval, and resubmittal to DOE will be followed.

Based on the responses to the OSR questions on the SAP, Attachment 2 to this letter (updated from the Attachment 2 provided with Reference 1) indicates the current requested disposition of SAP items identified for early approval. Please note that some items continue to be requested for consideration for early approval, some items are now not requested for early approval (based on the need to provide a Revision 1 to ABCN-24590-01-00008), and some combinations of these requests exist, related to the specific topics addressed by the OSR questions.

It is anticipated that a phased SAP approval will result. These approvals would fall into three general categories:

- ABCN-24590-01-00008 Revision 0 proposed changes, anticipated to be approved early (mid-December, 2001 timeframe), based on the original submittal coupled with additional information provided in these responses
- ABCN-24590-01-00008 Revision 1 proposed changes, anticipated to be approved sometime in the first calendar quarter of 2002 timeframe
- The balance of proposed ISMP changes, approved concurrent with the approval of the CAR (i.e., Initial Safety Analysis Report references removed with the approval of the Preliminary Safety Analysis Report).

It is requested that the OSR continue with the review and approval process for these proposed ISMP SAP changes, taking into account the attached responses. The response to question 01-ISMP-017 will continue to be developed and submitted by separate transmittal, forecast for the first week of December 2001.

A compact disk with this letter, and its Attachments 1 and 2, in Word format is provided for the OSR's information and use.

Please contact Mr. Bill Spezialetti at (509) 371-4654 for any questions or comment on this transmittal.

Very truly yours,

A. R. Veirup  
Prime Contract Manager

RLD/slr

- Attachments:
- 1) Responses to OSR Questions on the Proposed Revision to the Integrated Safety Management Plan Presented in ABCN-24590-01-00008
  - 2) Integrated Safety Management Plan proposed SAP revisions – Early Approval Request Items.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-001
<p><b>Cited Reference:</b></p> <ol style="list-style-type: none"> <li>1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii).</li> <li>2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i></li> </ol>
<p><b>Cited Submittal Text:</b></p> <p>"3.16.1.1 RPP-WTP Contractor Corporate Safety Oversight</p> <p>The RPP-WTP Contractor corporate organization provides ongoing oversight and review of Project matters that affect radiological, nuclear, and process safety. This corporate oversight is provided to the RPP-WTP Project Manager by senior level management of the RPP-WTP Project contractor corporate organization. To provide this support, corporate management periodically makes recommendations based on review of items . . .</p> <p>Corporate management also initiates special independent assessments or audits, as necessary, to obtain additional information concerning the effectiveness of radiological, nuclear, and process safety programs or management controls at the Project."</p>
<p><b>Question/Comment:</b></p> <p>In Section 3.16.1.1, on page 3-35 of the proposed ISMP, references to the "Executive Committee" have been replaced with the words "Corporate Safety Oversight," "corporate organization," and "Corporate management." However, in the section above 3.16.1.1, i.e., Section 3.16.1, references to the "Executive Committee" were retained.</p> <p>With respect to the "Executive Committee," Attachment 2 to CCN 023021, "Integrated Safety Management Plan (ISMP) Early Approval Request Items," states:</p> <p>"Committee requirements are not met. A Deficiency Report on this was submitted to QA."</p> <p>Attachment 2 to the ABCN, "Integrated Safety Management Plan (ISMP) Revised Standards Approval (SAP) ABCN Summary of Proposed ISMP Changes/Safety Evaluation," asserts that the deletion of the commitment for an "Executive Committee" is a "clarification update" and there is "no reduction of prior ISMP commitments."</p> <ol style="list-style-type: none"> <li>(a) Provide the details and present status of the above referenced Deficiency Report.</li> <li>(b) Confirm whether or not the commitment to an RPP-WTP Executive Committee is to be deleted.</li> <li>(c) If the commitment is to be deleted, provide your safety evaluation of the proposed reduction in commitment.</li> </ol>
<p><b>Explanation/Discussion:</b></p> <p>Not provided</p>

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-001 RESPONSE:**

A River Protection Project-Waste Treatment Plant (WTP) Project-wide cross-discipline review of the WTP Integrated Safety Management Plan (ISMP) was performed in August 2001 on proposed ISMP changes being prepared for a revised Standards Approval Package (SAP) submittal. This was transmitted to the DOE Office of Safety Regulation on September 17, 2001. During this cross-discipline review, it was noted that the WTP Project, due to not having an established Executive Committee, is non-compliant with the requirements of ISMP Section 3.16.1.1, "RPP-WTP Executive Committee". A Deficiency Report (24590-WTP-DR-QA-01-048) was prepared to address this condition, approved by ES&H management, and submitted to Project Quality Assurance for processing. Quality Assurance performed a screening evaluation of this condition and categorized it as a non-significant Condition Adverse to Quality, with a Cause Code of Policy not adequately defined, disseminated, or enforced.

The corrective action proposed in 24590-WTP-DR-QA-01-048 to address this deficiency was to update this section of the ISMP such that it accurately describes the Project commitment for continued conduct of this aspect of internal safety oversight. The update to the ISMP is to remove reference to an "Executive Committee" and to instead describe the corporate oversight function. Closure of this corrective action is scheduled for completion with the update of the ISMP, via controlled revision of the ISMP following DOE approval on this change.

Safety Evaluation

The proposed change to ISMP Section 3.16.1.1 is to remove reference to an "Executive Committee" and to describe that Corporate safety oversight in terms of Corporate senior-level management support that will continue to be provided to ensure that this aspect of internal safety oversight is available to the Project. While the function of Corporate oversight is to be retained by the Project with no reduction in commitment to provide this support, the mechanism for this support would not be through a chartered "Executive Committee".

On-going Corporate safety reviews, management assessments, and readiness determinations, as well as Corporate management sponsored external assessments, will continue to provide Project-level and topical oversight of the Project. This oversight will be used to provide advice and recommendations to the Project Manager relative to radiological, nuclear, and process safety.

A specific tool used in Corporate oversight is the BNI *Readiness Review / Management Assessment* (RR / MA) Instruction. The purpose of this instruction is to describe a process for an integrated review of the project at various phases of its life cycle: Post-Award, Execution, and Closeout.

The primary objective of the *Readiness Review* is to confirm implementation of the front-end tools, such as the Project execution plan and the development and issuance of budgets, schedules, and procedures prior to the start of any significant execution activity. It is not an audit, but rather a review to ascertain the adequacy and completeness of the plans, tools, controls, and staffing for the project to move into the Execution phase. The Readiness Review

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-001 RESPONSE (cont'd):**

provides for two-way communication where the Readiness Review Team identifies items for further development and the Project team can request resources, or other assistance, to get the project off to a good start.

The primary purpose of a *Management Assessment* is to verify the effective implementation of management tools, plans, and procedures to evaluate the status of the project, and to determine the effectiveness of project performance in meeting BNI and customer expectations.

The RR / MA is also an opportunity for the Corporate review teams to provide guidance, suggestions and information on best practices to the Project. RRs / MAs are not replacements for individual, on-going Operations and Functional reviews that will also be provided as part of Corporate oversight.

This Corporate safety oversight will be provided on a continual bases, per corporate procedures and guidelines for management assessment. Thus, the commitment for an internal safety oversight support function, as intended in the original ISMP commitment in ISMP section 3.16.1.1, is still provided and will remain as a Project commitment to provide this oversight.

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Revision 0, proposed change to this ISMP Section 3.16.1.1 be approved. An update to the original ISMP wording to remove reference to an "Executive Committee" in ISMP Section 3.16.1 will be provided in a Revision 1 update to ABCN-24590-01-00008. This ABCN update will include the additional Section 3.16.1 proposed change, as well as information in this response, in its Attachments 1 and 2. The ISMP Section 3.16.1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-002
<p><b>Cited Reference:</b></p> <ol style="list-style-type: none"> <li>1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii).</li> <li>2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i></li> </ol>
<p><b>Cited Submittal Text:</b></p> <p>From Section 11.1, "Design, Construction, and Commissioning Contractor Organization Roles, Responsibilities, and Authorities,"</p> <p><u>"Project Manager</u></p> <p>The Project Manager roles, responsibilities, and authorities related to safety include:</p> <ol style="list-style-type: none"> <li>1) Assigning roles and responsibilities for safety-related activities</li> <li>2) Setting performance expectations</li> <li>3) Developing management assessment policies</li> <li>4) Signatory on permit applications for construction of the Facility</li> <li>5) Implementing the Employee Concerns Program"</li> </ol>
<p><b>Question/Comment:</b></p> <p>In Section 11.1, on page 11-2 of the proposed ISMP, the responsibility of the Project Manager to serve as a member of the Executive Committee has been deleted.</p> <p>With respect to "Project Manager Roles, Responsibilities, and Authorities, Item 7)," Attachment 2 to CCN 023021, "Integrated Safety Management Plan (ISMP) Early Approval Request Items," states:</p> <p>"The PM does not serve as a member of the Executive Committee, as this committee does not currently exist. A Deficiency Report on this was submitted to QA."</p> <p>Attachment 2 to the ABCN, "Integrated Safety Management Plan (ISMP) Revised Standards Approval (SAP) ABCN Summary of Proposed ISMP Changes/Safety Evaluation," does not address this proposed deletion.</p> <ol style="list-style-type: none"> <li>(a) Provide the details and present status of the above referenced Deficiency Report.</li> <li>(b) Provide your safety evaluation of the proposed deletion of this Project Manager responsibility.</li> </ol>
<p><b>Explanation/Discussion:</b></p> <p>Not Provided</p>

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-002 RESPONSE:**

The status of the Deficiency Report addressing ISMP Section 3.16.1.1 is provided in the response to question/comment 01-ISMP-001.

As the “Executive Committee” is not used to provide Corporate oversight, the related functional responsibility for the Project Manager to serve on this committee was no longer required.

To ensure that the Project Manager is responsible to act upon recommendations from the on-going Corporate oversight that is provided, ISMP Section 11.1 will be proposed to be updated to add the following responsibility for the Project Manager:

- Act upon the findings and recommendations from Corporate oversight.

This would ensure that these findings and recommendations are addressed appropriately by the Project Manager to support Project execution in the area of radiological, nuclear, and process safety.

An update to the original ISMP ABCN-24590-01-00008, Rev. 0, wording to add the responsibility above will be provided in a Revision 1 update to ABCN-24590-01-00008. This ABCN update will include the additional Section 11.1 proposed change, as well as information in this response, in its Attachments 1 and 2. The ISMP Section 11.1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.



**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-003
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> 3.16.2 Safety Improvement Program A safety improvement program for radiological, nuclear, and process safety during operations will be developed and implemented by the PSC.
<b>Question/Comment:</b> In Section 3.16.2, on page 3-37 of the proposed ISMP, the words "for radiological, nuclear, and process safety during operations will be" replace the word "is."  With respect to "PSC developed and implemented safety improvement program," Attachment 2 to CCN 023021, "Integrated Safety Management Plan (ISMP) Early Approval Request Items," states: "Interpretation needed to clarify intent was for this section to be met during operations for radiological, nuclear, and process safety. Rewording proposed in ISMP SAP to clarify program applies during operations project phase."  Attachment 2 to the ABCN, "Integrated Safety Management Plan (ISMP) Revised Standards Approval (SAP) ABCN Summary of Proposed ISMP Changes/Safety Evaluation," asserts that the deletion of the commitment for a "Safety Improvement Program" prior to the operations project phase is a "clarification update" and there is "no reduction of prior ISMP commitments." (a) Explain the basis for the assertion the "intent was for this section to be met during operations." (b) Provide your safety evaluation of the proposed reduction in the commitment to have a Safety Improvement Program prior to the operations project phase. (c) As noted in BNI Letter CCN: 021904, August 6, 2001, "Contract Clause B.8 directs the WTP contractor to develop, obtain U.S. Department of Energy (DOE), Office of River Protection (ORP) approval, and implement an ISMS . . ." BNI is currently implementing an ISMS against a schedule that supports Phase I verification in April 2002. A core expectation of the Phase I ISMS is, "The ISMS should be continuously improved through an assessment and feedback process, which should be established at each level of work and at every stage in the work process." Given current BNI actions and commitments, and the requirements of the BNI contract, why does the ISMP limit this safety improvement program to operations?
<b>Explanation/Discussion:</b>  Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-003 RESPONSE:**

The specific timing for implementation of this specific program for safety improvement administered by the PSC was clarified as being during Operations (including hot commissioning) to ensure the Integrated Safety Management System (ISMS) core function of feedback and improvement is available during that period when significant radiological, nuclear, and process hazards exist. Other, similar approaches are used to meet this core function prior to operations.

To ensure that safety improvements are identified and implemented during the design, construction, and cold commissioning phases of the Project, when significant radiological, nuclear and process hazards do not exist, ISMS implementing mechanisms are in place to support safety improvement during those Project phases as well. The ISMS is under development, with the current on-going task of preparing the ISMS Description document. The current forecast timeframe to request DOE verification of the WTP Project ISMS is during the second calendar quarter of 2002.

One ISMS implementing mechanism supporting safety improvement is the Accident Prevention Council (APC). The APC provides a forum to elicit management and employee involvement, line and support organizations, to identify safety issues and implement safety improvements. The APC includes appointed and voluntary members representing all Project organizations. Regularly scheduled APC meetings are held to identify, discuss, and propose action(s) to Project management to address Project-wide, organizational, and employee safety issues. In addition to the APC, the Project also receives information relative to safety improvement through various assessment and corrective action mechanisms such as Management Assessment, self assessment, Corrective Action Management System, Process Improvement teams, and Six Sigma.

Use of the APC and these other mechanisms satisfies the ISMP intent that a safety improvement process be implemented for the Project. As the APC is considered to be part of the ISMS for the Project, it addresses worker safety issues that are present during design, construction, and cold commissioning activities.

An update to the original ISMP ABCN-24590-01-00008, Rev. 0, wording to describe the use of the APC prior to start of hot commissioning will be provided in a Revision 1 update to ABCN-24590-01-00008. This ABCN update will include the additional Section 3.16.2 proposed change, as well as information in this response, in its Attachments 1 and 2. The ISMP Section 3.16.2 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-004
<p><b>Cited Reference:</b></p> <ol style="list-style-type: none"> <li>1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii).</li> <li>2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i></li> </ol>
<p><b>Cited Submittal Text:</b></p> <p>3.16.7 Lessons Learned</p> <p>Lessons-learned includes the identification, documentation, validation, and dissemination of lessons-learned information from the Project. Industry experience that draws on lessons learned, events, deficiencies, and other similar information from other operating sites for the purpose of enhancing the safety of the facility will be considered during the design phase of the project.</p> <p><b>1.3.16 Configuration Management</b> (paragraph 4, page 1-22)</p> <p>The need for changes to engineered features or administrative controls can arise from commissioning, human factors reviews, corrective actions identified by the incident investigation process internal oversight process and the performance of assessments, lessons learned program, employee feedback program, performance of emergency drills and exercises, need to improve the waste process operation, and continuous review of public and worker safety.</p>
<p><b>Question/Comment:</b></p> <p>In Section 3.16.7, on page 3-40 of the proposed ISMP, references to a lessons-learned "program" "established and maintained by the ES&amp;H Organization" have been deleted. Also, the word "established" was replaced with the word "considered." Finally, the phrase "early in Part B" was replaced by the phrase "during the design phase of the project."</p> <p>With respect to "Project Lessons Learned," Attachment 2 to CCN 023021, "Integrated Safety Management Plan (ISMP) Early Approval Request Items," states:</p> <p>"Requirements, as written to have a "program", are not clear.</p> <p>Rewording proposed in ISMP SAP to clarify general application of lessons learned, rather than a specific program."</p> <p>Attachment 2 to the ABCN, "Integrated Safety Management Plan (ISMP) Revised Standards Approval (SAP) ABCN Summary of Proposed ISMP Changes/Safety Evaluation," asserts that the deletion of the commitment for specific program for lessons learned is a "clarification update" and there is "no reduction of prior ISMP commitments."</p> <p>Provide your rationale that</p> <ol style="list-style-type: none"> <li>(a) the deletion of the "program" for lessons learned,</li> <li>(b) the change from "established" to "considered," and</li> <li>(c) the change from "early in Part B" to "during the design phase of the project,"</li> </ol> <p>are not a reductions in commitments or your safety evaluations of the proposed reductions in commitments.</p>
<p><b>Explanation/Discussion:</b></p> <p>Not Provided</p>

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-004 RESPONSE:**

The WTP Project has prepared a procedure to support the development and implementation of a Lessons Learned Program. The WTP Project lessons learned procedure (*Lessons Learned*, 24590-WTP-GPP-SIND-005) provides direction for conducting this program.

The ISMP SAP ABCN will need to be revised to reflect the institution of this program as established and maintained by the ES&H Organization. In addition to retaining the existing text, a revision to ISMP Section 3.16.7 will be proposed in an ABCN-24590-01-00008 update (Revision 1) to also address the following points.

- Development of a Lessons Learned Program establishes a consistent manner in which information is captured or developed and disseminated throughout all phases of the WTP Project to ensure on-going improvement of WTP safety and reliability. [Note the existing reference to “Part B” will be changed to “during the design process” to reflect when this program is implemented.]
- Development and implementation of such a program is required per DOE Order 232.1A, *Occurrence Reporting and Processing of Operations Information*, as well as by the ISMP and QAM Authorization Basis documents. Lessons Learned incorporates the Integrated Safety Management System Core Function of Feedback and Continuous Improvement

To define the WTP project approach for addressing Lessons Learned in the Engineering design process, an Engineering Department Lessons Learned System is defined in the Engineering Department Project Instruction (EDPI), *Lessons Learned System*, 24590-WTP-3DP-G01B-00004. This Lessons Learned System EDPI applies to Engineering department personnel, but does not replace the process describing 24590-WTP-GPP-SIND-005, *Lessons Learned*. The requirements of 24590-WTP-GPP-SIND-005 “umbrella” procedure for Project-wide lessons learned are also met.

The objectives of the WTP Engineering Lessons Learned System are to:

- Contribute WTP Lessons Learned to the BSII Engineering Department Lessons Learned Database.
- Identify best practices by providing feedback on work process improvements and innovative approaches.
- Identify recurring or significant problems.
- Provide useful information about suppliers.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-004 RESPONSE (cont'd):**

The Engineering Lessons Learned System involves identification, assessment, dissemination, and appropriate incorporation of Lessons Learned into “Best Practices” and, ultimately into the Engineering standards, guides, and procedures.

An update to the original ISMP ABCN-24590-01-00008, Rev. 0, wording to describe the Project-wide Lessons Learned process, including the Engineering Lessons Learned System, will be provided in a Revision 1 update to ABCN-24590-01-00008. This ABCN update will include the additional Section 3.16.7 proposed change, as well as information in this response, in its Attachments 1 and 2. The ISMP Section 3.16.7 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-005
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> Proposed ISMP Section 3.12, "Human Factors," in its entirety.
<b>Question/Comment:</b> In the proposed ISMP, Section 3.12, "Human Factors," is replaced in its entirety. With respect to "Human Factors," Attachment 2 to CCN 023021, "Integrated Safety Management Plan (ISMP) Early Approval Request Items," states: "Justification for revision of this entire section includes: <ol style="list-style-type: none"> <li>1. Section was not entirely technically correct or proper</li> <li>2. Section contained some cultural (UK vs. USA) and corporate (BNFL vs. Bechtel) differences that no longer apply.</li> <li>3. Section was too narrowly focused</li> <li>4. Human factors responsibilities and commitments were not adequately explained nor delineated</li> <li>5. Section does not fully incorporate regulatory expectations</li> </ol> Rewording proposed in ISMP SAP." Attachment 2 to the ABCN, "Integrated Safety Management Plan (ISMP) Revised Standards Approval (SAP) ABCN Summary of Proposed ISMP Changes/Safety Evaluation," repeats the above five conclusions as the basis/rationale for the proposed revision. The proposed revision "Basis for AB impact assessment/Safety Evaluation of Revision" states that replacing the text of this section in its entirety is a "clarification update" and there is "no impact on prior ISMP commitments or safety basis for the WTP relative to safety criteria." Without further explanation it is not clear that this basis holds merit. Provide the facts supporting the above five conclusions by answering the following questions: <ol style="list-style-type: none"> <li>(a) What was not technically correct? What was not proper?</li> <li>(b) What cultural differences no longer apply? What corporate differences no longer apply?</li> <li>(c) In what way was the section too narrowly focused?</li> <li>(d) What human factors responsibilities and commitments were not adequately explained or delineated?</li> <li>(e) What regulatory expectations were not fully incorporated?</li> <li>(f) How does the proposed revision resolve the above problems?</li> </ol>
As an alternative to answering the above six questions, the Contractor may address the issue as if this were an initial submittal rather than a proposed change by providing a description of how the new Section 3.12 documents the processes by which human-factors-related requirements are incorporated into RPP-WTP programs.
<b>Explanation/Discussion:</b>  Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-005 RESPONSE:**

The Contractor prefers the proposed revision of ISMP Section 3.12 to be considered as an initial submittal, rather than a proposed change to the existing text. The original section was not written by a human factors specialist and does not fully reflect the WTP Project approach to incorporate human factors into the design, construction, commissioning, operation, and deactivation of the WTP. Therefore, a complete rewrite of the section was merited inasmuch that it was felt the commitments to the DOE/RL-96-0006 and the Authorization Basis requirements for human factors implementation were not fully met.

The following overview briefly describes how the proposed update to ISMP Section 3.12 documents the process by which the human factors-related requirements, as incorporated into WTP Project programs, are addressed in the ISMP.

- The intent of proposed revision to this section of the ISMP is to fulfill contractual commitments and Authorization Basis requirements relative to human factors. The WTP Project has made a commitment to adopting and following, to the extent it needs to be tailored for WTP Project application, IEEE-1023, the IEEE Guide for the Application of Human Factors Engineering to Systems, Equipment, and Facilities of Nuclear Power Generating Stations, 1988. Section 3.12, as currently proposed to be rewritten, more closely fulfills the expectations of that document and the requirements therein.
- The breadth of the section 3.12 proposed revision is aligned with the goal of reducing and/or eliminating the possibilities of human error, while ensuring good human factors practice. Moreover, as Section 3.12 is proposed to be rewritten, it is more closely aligned with American industry and DOE good practices, as well as the current Contractor philosophy for integrating human factors into the design and operation of the WTP.
- The proposed revision Section 3.12 is comprehensive and, at a high level, addresses those issues which are typically found requiring intervention for DOE waste processing facilities with hazards comparable to the WTP, as well as comparable hazards in other DOE nuclear facilities and commercial nuclear power plants. It was with these objectives in mind that this ISMP section is proposed to be rewritten.

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Rev. 0, proposed change to this ISMP Section 3.12 be approved. A Revision 1 update to ABCN-24590-01-00008 can include the information in this response in its Attachment 2. The ISMP Section 3.12 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-006
<b>Cited Reference:</b> <i>ISMP Reference:</i> Section 3.6.1 Normal Operations, last paragraph
<b>Cited Submittal Text:</b> Section 3.6.1 Normal Operations, last paragraph: "The close relationship between Hanford tank farms operations and the RPP-WTP may require additional administrative controls and documentation in support of AP-106 operations."
<b>Question/Comment:</b> This section appears to reflect the original privatization baseline with the Contractor operating AP-106 as a feed tank. What is the significance of AP-106 versus interface with the balance of the tank farm system?
<b>Explanation/Discussion:</b>  Not Provided
<b>QUESTION/COMMENT NO. 01-ISMP-006 RESPONSE:</b>  This clause "in support of AP-106 operations" will be deleted from this sentence, as the specific interface point of this specific tank in the Hanford Tank Farm facility is not particularly significant. Also, a reference to Tank AP-106 in ISMP Section 7.4 on page 7-3 will be revised to provide a more general reference to the interface between the Hanford Tank Farm and the WTP.  This proposed Authorization Basis change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 3.16.1 and Section 7.4 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.



**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-007
<b>Cited Reference:</b>
<b>Cited Submittal Text:</b> Section 3.7 Proven Engineering Practices, first paragraph: "For the novel uses of existing technologies (such as the use of specific ion exchange resins), the PHA ensures that the safety aspects are examined in a structured research and development program to be assured that hazard potential are reduced as far as practicable or that protection put in place is commensurate with the assessed magnitude of the Hazard."
<b>Question/Comment:</b> "PHA" has been changed to "ISM process" in other places in the ISMP. Is "PHA" the intended term for this section?
<b>QUESTION/COMMENT NO. 01-ISMP-007 RESPONSE:</b>  PHA was the intended term to be used in this section. PHA is used as a tool in the ISM process activity of hazard assessment and was substituted for ISM in this particular section, where use of the tool used was meant to be cited in this context. While the term PHA was replaced with ISM is several other places in the ISMP, where the overall process was meant to be cited in those particular instances and context, this section has a PHA focus.  Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Rev. 0, proposed change to this ISMP Section 3.7 be approved.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-008
<b>Cited Reference:</b>
<b>Cited Submittal Text:</b>  Section 3.9.1.1 Radioactive Material Confinement, first paragraph: "Unfiltered ventilation flow is normally from areas of lower potential contamination to areas of higher potential contamination."
<b>Question/Comment:</b> The revised wording implies that ventilation flow is sometimes from areas of higher contamination to lower contamination or filtered flow can be from areas of higher potential contamination to lower potential contamination areas. What are the scenarios in the facility where filtered or unfiltered ventilation flow is from higher to lower contamination areas?
<b>Explanation/Discussion:</b>  Not Provided
<b>QUESTION/COMMENT NO. 01-ISMP-008 RESPONSE:</b>  Requirements of 10 CFR Part 835, specifically 835.1002 (c), will be met, relative to control of contaminated air flows and worker protection from airborne radiological hazards. WTP facility areas ventilation flow is normally from areas of lower potential contamination to areas of higher potential contamination.  The normal ventilation flow path is from lower contamination areas to higher contamination areas, and the ventilation systems are provided (as required) to support this. The building exhaust from the contaminated area is filtered and exhausted to the environment. If there is a loss of ventilation flow, then there is a potential for offnormal or accidental back flow from a higher contamination area to a lower area. The vent path to occupied areas is filtered to address these upset conditions. An example of potential backflow is from C5 to C3 in maintenance areas connected to C5 areas. These are designated C3/C5 areas and the ventilation exhaust is through a C5 area.  Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Rev. 0, proposed change to this ISMP Section 3.9.1.1 be approved.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-009
<b>Cited Reference:</b>
<b>Cited Submittal Text:</b>  Section 3.11 Safety Systems Design, second paragraph: BNI proposes deleting the hierarchy of safety measures in this section. BNI states this paragraph is redundant and unnecessary for this section.
<b>Question/Comment:</b> Where is the Section 3.11, second paragraph information covered? Alternatively, if not discussed elsewhere, explain why this reduction in commitment is appropriate, or alternatively, why the ISMP is acceptable without this description.
<b>Explanation/Discussion:</b>  Not Provided
<b>QUESTION/COMMENT NO. 01-ISMP-009 RESPONSE:</b>  The hierarchy of the project approach for incorporating safety measures into the WTP design, as described in ISMP section 3.11, reflects a prior version of a BNFL-developed approach. The current approach applied by the project is reflected in the ISM process, as described in the Safety Requirements Document (SRD) Appendices A and B. The ISM process approach provides the methodology for an integrated hazard and accident analysis, using input from engineering, safety analysis, and operations personnel on ISM Teams to assess WTP hazards and identify appropriate safety requirements and standards to address these hazards. The principle of defense-in-depth is part of the ISM process. The hierarchy of implementing safety features is described in the ISM process.  Design aspects of the ISM process approach are also described in the ISMP Sections 3.7.1 and 3.7.2, as well as in the SRD Appendices A and B detailed description of the ISMP process, such that this outdated safety measures hierarchy is no longer required and can be removed. The commitment to ensure safety measures are provided in the WTP design is retained in the AB documentation.  Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Rev. 0, proposed change to this ISMP Section 3.11 be approved.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-010
<b>Cited Reference:</b>
<b>Cited Submittal Text:</b> Section 5.3 Configuration Management, first bullet: "The procedures ensure that, prior to a given change, the following considerations are addressed: The need to perform an unreviewed safety question (USQ) evaluation, <u>after production operation authorization</u> "
<b>Question/Comment:</b> The Contractor proposed to revise the section by adding the words "after production operation authorization." Explain why the need to perform an unreviewed safety question (USQ) evaluation is limited to "after production operation authorization," and why a USQ evaluation need not be performed during commissioning.
<b>Explanation/Discussion:</b>  Not Provided
<b>QUESTION/COMMENT NO. 01-ISMP-010 RESPONSE:</b>  <p>The term "after production operation approval" was added for consistency with the DOE position on changes to the AB, as described in DOE/RL-97-13. In item 3.5.a (5) it is noted that the contractor may make a revision to the Authorization Basis without prior DOE approval, if the revision does not result in an unreviewed safety question (USQ) if a Production Operations Authorization exists.</p> <p>It was interpreted from DOE/RL 97-13 that the USQ evaluation processes would need not be performed until after production authorization.</p> <p>However from review of the Contract, specifically the timing of deliverables in the contract Section C Table S7-1, it was concluded that since the USQ plan is finalized, and the SAR and TSRs approved prior to start of hot commissioning, that the appropriate time to perform USQ evaluations would be after hot commissioning approval. This would ensure that the changes that potentially impact the safety basis for the Authorization Basis defined by the DOE-approved SAR and TSR would be subject to USQ evaluations.</p> <p>This proposed changes in ISMP Section 5.3 needs to be revised to reflect this timing for USQ process after hot commissioning approval. [Note: Cold commissioning hazards not associated with radiological, nuclear, and process safety concerns may need a "USQ-like" process, commensurate with the chemical hazard controls required during cold commissioning.]</p> <p>This proposed AB change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 5.3 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>

11/19/01

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-11
<b>Cited Reference:</b> DOE/RL-96-0003, Revision 1, Section 4.3.2, item D "The current SRD and ISMP and an assessment of compliance ..."
<b>Cited Submittal Text:</b> ISMP, Section 9.0 Scheduling of Activities Related to Safety  "This chapter provides the sequence of events for activities related to safety and deliverables for design, fabrication and construction, commissioning, operation, and deactivation phases of the Project. The activities related to safety to be conducted during these phases are also presented."
<b>Question/Comment:</b>  Contrary to the statement in the cited text, Table 9.1 does not list radiation protection program (RPP) among key activities related to safety during design, fabrication and construction, and commissioning phases. The first phase for which the RPP is listed among key activities related to safety is operations. Explain the following:  (a) Why does the ISMP Table 9.1 not reflect current practices and commitments with respect to preparation and implementation of the RPP during design, construction and fabrication, and commissioning? (b) What evaluation did BNI perform to assure that the revised ISMP submittal in support of construction authorization has been updated to reflect current practices related to radiological, nuclear, and process safety during construction?
<b>Explanation/Discussion:</b>  Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-011 RESPONSE:**

Response to questions (a) and (b) above:

- (a) ISMP Table 9-1 was not updated to reflect current practices as part of planned work, because the Radiation Protection Program for Design and Construction (RPP) (BNFL-TWP-SER-003) is already approved and implemented. The next change to the program will be required to support operations (including hot commissioning). However, Table 9-1 will be revised to show the progression of the RPP through the listed activities.
- (b) Radiological Safety conducted a review of the proposed ISMP SAP revision and verified radiation protection program organization comments were incorporated prior to submittal.

As RPP activities will need to be addressed during design, construction, and commissioning of the WTP, applicable RPP activities will be included as listings in each of Table 9-1, Table 9-2, and Table 9-3 subsections. These inputs will be solicited from the Project Radiological Safety organization.

The ISMP SAP ABCN will need to be updated to reflect these activities. Specific to construction, the RPP activities to support construction site monitoring for radiological hazards (e.g., legacy radiological contamination monitoring), as well as protection of construction workers from radiological hazards (e.g., radiography use), will be added to Table 9-2.

This proposed AB change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 9 tables change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-12
<p><b>Cited Reference:</b>  SRD SC 4.3-7, Rev. 4, Page 4-16, Sentence 2, "If credit is taken for operator action to satisfy the accident exposure standards of Safety Criteria 2.0-1 and/or 2.0-2, adequate radiation protection shall be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of <b>5 rem whole body gamma [emphasis added]</b> and 30 rem beta skin for the duration of the accident."</p> <p>10 CFR 835.202(a) Occupational dose limits for general employees, "...the occupational dose received by general employees shall be controlled such that the following limits are not exceeded in a year: (a) A total effective dose equivalent of 5 rems..."</p> <p>10 CFR 835 Subpart K - Design and Control.</p>
<p><b>Cited Submittal Text:</b>  ISMP Section 1.3.7, Page 1-10, Second sentence from the bottom, "If credit is taken for operator action to satisfy the public radiological exposure standards in the SRD Volume II, adequate radiation protection is provided to permit access and occupancy of the control room or other control location under accident conditions without personnel receiving radiation doses in excess of <b>25 rem TEDE whole body gamma [emphasis added]</b> and 30 rem beta skin for the duration of the accident."</p> <p>ISMP Section 1.3.8, Page 1-15A, Paragraph 2, Sentence 1, "If credit is taken for operator action to satisfy the worker radiological exposure standards of the SRD Volume II, adequate radiation protection is provided to permit access and occupancy of the control room or other control location under accident conditions without personnel receiving radiation doses in excess of <b>5 rem whole body gamma [emphasis added]</b> and 30 rem beta skin for the duration of the accident."</p>
<p><b>Question/Comment:</b>  a) What is the reason for the differences in whole body gamma doses to the operator in ISMP Sections 1.3.7 and 1.3.8 and SRD SC 4.3-7?</p> <p>b) Section 1.3.7 communicates that the control room worker would be expected to perform his occupational duties under a scenario that exceeds the 10 CFR 835.202 dose limits. How does relaxation of the exposure limit to the control room worker from 5 rem whole body gamma to 25 rem TEDE meet the 10 CFR 835.202 dose limits and the 10 CFR 835 Subpart K dose and ALARA requirements?</p>
<p><b>Explanation/Discussion:</b>  Not Provided</p>

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-012 RESPONSE:**

This particular “change” in the ISMP was introduced as a typographical error and was not listed as a proposed change in the ABCN-24590-01-00008, Rev 0, Attachment 2. There was no intent to change the control room operator exposure standard from 5 rem to 25 rem, but rather to leave the existing value at 5 rem. A proposed approach for potential revision of this standard is under separate evaluation and is the subject of a stand-alone ABCN, outside of the ISMP SAP submittal.

The ISMP SAP ABCN will need to be revised to restore the text in this sentence to the original version.

This proposed ABCN correction will be incorporated in a Revision 1 to ABCN-24590-01-00008. The retraction of this typographical error in ISMP Section 1.3.7 would be reflected in ABCN-24590-01-00008, Revision 1.



**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-013
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> ISMP, Rev 6, Section 5.6.8, page 5-13: In the first line of the paragraph, the proposed change deletes the phrase "and workers".
<b>Question/Comment:</b> The rationale given by the Contractor for proposing to delete "workers" was that section 7.8 of the SRD applied to the public only. However, Section 7.8-2, item (7), refers to a "description of protective actions for responders, <u>workers</u> (emphasis added), and the public...". Furthermore, each of the subsections of 7.8 refers to Section 3.10 of the ISMP as one of the Implementing Codes and Standards, and Section 3.10 includes a table 3-1. The ninth item in the table is called "Emergency Termination and Recovery" and its content is to include, among other things, "...recovery criteria for protection of <u>workers</u> (emphasis added), and the general public ...". Also, the last line of the first paragraph of Section 3.3.1.7 states, "the elements of the Emergency Plan will be designed to ensure that the Project . . . is prepared to respond promptly, efficiently, and effectively to any emergencies during operations to protect the public and <u>workers</u> (emphasis added)." Finally, the first sentence of Section 1.3.18 states "An important aspect of the safety approach is to ensure the health and safety of the public and the <u>workers</u> (emphasis added) ...". Based on this, explain why "workers" should be deleted.
<b>Explanation/Discussion:</b>  Not Provided
<b>QUESTION/COMMENT NO. 01-ISMP-013 RESPONSE:</b>  "Workers" has been inadvertently removed from the ISMP text and will be reinserted.  This proposed ABCN correction will be incorporated in a Revision 1 to ABCN-24590-01-00008. The retraction of this typographical error in ISMP Section 5.6.8 would be reflected in ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-14
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> ISMP Section 1.3.6, first paragraph, last sentence: "Well-established methods that include factors such as the material at risk and the rate and duration of the release of hazardous material are used in the determinations of the source terms (DOE 1994)." (rev 6c struck out ref to NRC 1988)
<b>Question/Comment:</b> Both references exist in the previous version of the ISMP, but the text in Section 1.3.6 deletes the reference to the NRC document and only retains the DOE reference. The basis for the change is provided in Attachment 2 of the ISMP, which states, "This reference to NRC is no longer applicable to the RPP-WTP." This is without explanation or basis. What is the technical basis for the removal of the reference "NRC 1988" and why is this not a reduction in commitment?
<b>Explanation/Discussion:</b> The references NRC 1988 and DOE 1994 are as follows:  NRC 1988: <i>Nuclear Fuel Cycle Accident Analysis Handbook</i> , NUREG-1320, in revision, US Nuclear Regulatory Commission, Washington, DC.  DOE 1994: <i>Airborne Release Fractions/Rates and Respirable Fractions for Nonreactor Nuclear Facilities</i> , DOE-HDBK-3010-94, US Department of Energy, Washington, DC.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-014 RESPONSE:**

The reason for removal of reference to NUREG 1320 from the ISMP was not properly characterized by stating that NRC references do not apply. In actuality, NRC references are retained in other places in the ISMP where they provide appropriate requirements and implementing standards for use by the WTP Project.

In the case of NUREG 1320, the reason for considering the deletion of this reference is that this NRC handbook from 1988 has been updated and superseded by NUREG/CR-6410, also entitled *Nuclear Fuel Cycle Accident Analysis Handbook*. The NUREG/CR-6410 reference is cited for use by the WTP Project in procedure 24590-WTP-GPP-ESH-SANA-001, *Accident Analysis*, and is an appropriate source document to cite in the ISMP section on accident analysis.

However, since there is some information retained in the NUREG 1320 that may be of value in accident analysis modeling (including some fire scenario assumptions and rules of thumb), instead of deleting the reference to NUREG 1320, a revision to the ISMP SAP ABCN will be prepared to retain this reference (NRC 1988) and to add a new reference to NUREG/CR-6410 (as NRC 1998). These references would be kept in addition to the prior reference to the DOE 3010 handbook.

Thus, instead of leading to a conclusion of a reduction of commitment this approach would make these three references available for the accident analysis modelers for use in their analysis. Also, per Project procedure, if NUREG/CR-6410 or the 3010 handbook do not provide the information necessary, other appropriate information can be used to develop source terms and release modeling. This source of this information would be justified in the accident analysis assumptions and be available for DOE review.

The ISMP SAP ABCN will need to be revised to add a reference to NUREG/CR-6410. This reference will be cited in the text of ISMP Section 1.3.6 and in ISMP Chapter 13 as “NRC 1998”, to reflect the issue of NUREG/CR-6410 in March 1998.

This proposed AB change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 1.3.6 and Section 13 (References) change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-015
<b>Cited Reference:</b>
<b>Cited Submittal Text:</b> Section 3.16.5, Performance Monitoring [Page 3-39]. "Hazardous material and waste tracking systems" (Word "inventory" was deleted).
<p><b>Question/Comment:</b> How does a "hazardous material and waste tracking system" differ from a "hazardous material inventory and waste tracking system?"</p> <p>The reviewers note that BNI procedure 24590-WTP-GPP-SIND-014_0, discusses a system for keeping the hazardous material inventory updated and notes the inventory will be updated each time a potentially hazardous chemical is brought on the site.</p>
<b>Explanation/Discussion:</b>
Not Provided
<p><b>QUESTION/COMMENT NO. 01-ISMP-015 RESPONSE:</b></p> <p>The word “inventory” was inadvertently proposed to be removed. The ISMP SAP ABCN will need to be revised to reinstate this wording to include “inventory”.</p> <p>This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 3.16.5 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-16
<b>Cited Reference:</b>
<b>Cited Submittal Text:</b> Table 8.1, Safety Management Records [Page 8-2]. Deletion of "Initial Safety Analysis Report" (and "Hazard Analysis Report")
<b>Question/Comment:</b> In other cases where BNI intends to delete references to the ISAR, BNI notes, "...as this information will be provided in the PSAR, DOE confirmation on removal of ISAR reference is required." Why are these deletions (in Table 8.1) not subject to the same limitation on OSR evaluation (i.e., DOE confirmation requirement)?
<b>Explanation/Discussion:</b>
Not Provided
<p><b>QUESTION/COMMENT NO. 01-ISMP-016 RESPONSE:</b></p> <p>The deletions in Table 8.1, relative to the ISAR, are subject to the same limitation on OSR evaluation (i.e., DOE confirmation requirement). This caveat will be added to an ISMP SAP ABCN Attachment 2 revision to denote this requirement.</p> <p>This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 8, Table 8.1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-17
<b>Cited Reference:</b> 24590-WTP-QAM-QA-01-001, "Quality Assurance Manual," Revision 0.
<p><b>Cited Submittal Text:</b> ISMP Section 3.3.1.5, Quality Assurance Program (QAP) [Pages 3-7, 3-8] and ISMP Chapter 11.0, "Organization Roles, Responsibilities, and Authorities [Pages 11-2, 4, 5, 6, and 7]. These pages contain deletions associated with removing items nominally covered in the QAM. As noted below, the reviewer could not identify equivalent text in the QAM. The following are <u>typical</u> of deletions from the ISMP that could not be found in the QAM:</p> <p>Text deleted from ISMP: "The provisions of the Quality Assurance Requirements and Description document DOE/RW/0333P will be applied to QL-1 and QL-2 items and activities associated with HLW services from design through production and acceptance." Text in the QAM: The QA Manual does not describe classification but rather notes that it is "...developed and controlled through engineering procedures..."</p> <p>Text deleted from ISMP: "The Project Manager roles, responsibilities, and authorities related to safety include...Responsibility for RPP-WTP Safety." Text in QAM: "The Project Manager is responsible for the following major functions: Establishing the overall vision for the project and instilling a culture of excellence for safety and quality." (The reviewer does not consider these statements equivalent.)</p> <p>Text deleted from ISMP: "The roles, responsibilities, and authorities related to safety of the Area Project Managers, in their respective areas of responsibility, include...Implementing management assessment policies, in their respective area of responsibility." Text in QAM: No equivalent text found.</p> <p>Text deleted from ISMP: "The safety-related roles, responsibilities, and authorities of the Engineering Manager include...Designing fire prevention, detection, and suppression features in compliance with state and federal requirements." Text in QAM: No equivalent text found.</p> <p>Text deleted from ISMP: "The roles, responsibilities, and authorities related to safety of the ES&amp;H Manager include...Implementing internal safety and oversight functions." Text in QAM: No equivalent text found.</p>
<b>Question/Comment:</b> Where is the equivalent text to the deletion in Section 3.3.1.5 and all deletions in Chapter 11 found in the QAM? Alternatively, what is the BNI safety evaluation for deletions that are not found in the QAM?
<p><b>Explanation/Discussion:</b></p> <p>Not Provided</p>

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-017 RESPONSE:**

Redundancies between the ISMP, Rev. 6c, and the QAM, Rev. 0, safety-related roles, responsibilities, and authorities for the design, construction, and commissioning (DC&C) phase of the Project, as assigned to individuals and organizations within BNI (the DC&C Contractor), were compared to determine if there was an overlap in these responsibilities. The items in the ISMP redundant to the QAM were proposed for removal from the ISMP in ABCN-24590-01-00008 (the ISMP revised Standards Approval Package).

Appendix 17-1 provides a crosswalk of the responsibilities items in ISMP Section 11.1 to the “Section Level” in the QAM. The QAM Policy(s)/Section(s)/page(s), where redundant responsibilities are cited in the ISMP Section 11.1, is/are noted in [brackets] following those strikethrough text ISMP entries that are proposed for deletion in ABCN-24590-01-00008.

Appendix 17-2 provides a crosswalk of the responsibilities items in ISMP Section 11.1 to the “Responsibilities Text Level”, keyed to the existing responsibility item numbers in Revision 6c of the ISMP proposed for deletion.

It should be noted that these “redundancies” are typically not found as verbatim duplication, but rather represent elimination of functionally redundant roles. Thus, the removal of the ISMP responsibilities is subject to interpretation on which items are functionally redundant between the ISMP and QAM entries.

This crosswalk information will be added to an ISMP SAP ABCN Attachment 2 revision to supplement this clarification. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 11.1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-18
<b>Cited Reference:</b> 24590-WTP-QAM-QA-01-001, "Quality Assurance Manual," Revision 0.
<b>Cited Submittal Text:</b> ISMP Figure 11-1 [Page 11-3]. Figure 11-1, "Management Structure and Organization for the BNI Design, Construction, and Commissioning Contract"
<b>Question/Comment:</b> The QAM shows a "solid line" relationship between the Corporate Manager of Quality Assurance and the QA Manager. This relationship ensures the independence of the QA Manager and was a consideration in the OSR approval of the QAM. Why does Figure 11-1 not show the "solid line" relationship between the Corporate Manager of Quality Assurance and the QA Manager?
<b>Explanation/Discussion:</b> Not Provided
<p><b>QUESTION/COMMENT NO. 01-ISMP-018 RESPONSE:</b></p> <p>In order to bring ISMP Figure 11-1 into agreement with QAM Policy Q-01.1 Figure 1, a “box” for the Corporate Manager of Quality Assurance and the “solid line” relationship between the Corporate Manager of Quality Assurance and the QA Manager will be added to Figure 11-1.</p> <p>The ISMP SAP ABCN will need to be revised to show this update to Figure 11-1. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 11-1, Figure 11-1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>



**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-19
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> ISMP Section 3.6.3, last paragraph  Was: A specific list of SSCs credited for worker and public protection is provided in ISAR Section 4.8, "Controls for the Prevention and Mitigation of Accidents". These SSCs are identified in the master equipment list, which is maintained by the Configuration Management Program as discussed in ISMP Section 5.3, "Configuration Management".  Changed to:  These Important-to-Safety SSCs are identified in the Configuration Management databases, which are maintained by the Configuration Management Program as discussed in ISMP Section 1.3.16, "Configuration Management".
<b>Question/Comment:</b>  In the original ISMP text, there was statement indicating that a specific list of ITS SSCs was included in the ISAR. This sentence was deleted, rather than updated to reference such a list in the PSAR. The reason for deleting, rather than updating the text in ISMP, was not provided. Does BNI intend to provide a specific list of ITS SSCs in the PSAR? If not, what is the basis for this reduction in commitment, or alternatively, why is the ISMP acceptable without such a commitment?
<b>Explanation/Discussion:</b>  Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-019 RESPONSE:**

The identification of accident analysis-credited Important To Safety (ITS) structures, systems, and components (SSCs) will be provided in the Preliminary Safety Analysis Report (PSAR) in Chapters 4 of facility-specific PSAR volumes. These items will include Safety Design Class and Safety Design Significant items credited in control strategy results from the ISM process.

These ITS items will be denoted in the Plant Item List and will be configured items in the Project Configuration Management Program. The approach to identify and provide configuration management for these ITS SSCs is consistent with the prior approach and no reduction in commitment is present.

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Revision 0, proposed change to this ISMP Section 3.6.3 be approved.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-020
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i> . 3. RL/REG-96-0003, <i>Section 4.3.2, Item D</i>
<b>Cited Submittal Text:</b>  Section 5.1, Process Safety Information  The interaction matrix for the RPP-WTP is provided in Section 4.2, "Chemical Interactions", of the Part A Hazard Analysis Report (HAR). A list of the process chemicals used in the RPP-WTP and their hazardous characteristics is also provided in the Part A HAR Section 4.1.2, "Process Chemicals".
<b>Question/Comment:</b>  The text "Part A" was added to the existing HAR citations in Section 5.1 ISMP. These HAR citations identify the process chemical hazards that are addressed under the Process Safety Management program described in Section 5.0 of the ISMP. The justification for the change states that this was done because it "clarifies historic Part A information." The purpose of this ISMP revision is to describe safety management processes for the construction phase of the facility, not document "historic Part A information." Why weren't these citations updated to reflect process hazards information in the PSAR?
<b>Explanation/Discussion:</b>  Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-020 RESPONSE:**

The ISMP will be updated to state that the process hazard information will be included in the Chapters 3 of the PSAR facility-specific volumes. This information is included in the PSAR chapter on “Hazard and Accident Analysis”, rather than in a stand-alone Hazard Analysis Report. The SRD Safety Criterion 9.1-7 was updated and approved by DOE to reflect the inclusion of the hazard analysis information with the PSAR.

While there is not anticipated to be “process” safety management processes implemented during the construction phase of the facility, the update of ISMP will also reflect the commitment to provide this information in the PSAR, such that the processes are addressed in the design, construction, and cold commissioning phases (as well as during hot commissioning and operations when process hazards exist).

The ISMP SAP ABCN will need to be revised to propose this update to Section 5.1. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 5.1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-021
<b>Cited Reference:</b>  1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(ii). 2. 10 CFR 830, <i>Nuclear Safety Management</i>
<b>Cited Submittal Text:</b>  Section 2.0, Compliance with Laws and Regulations  General compliance with statutes that relate to radiological, nuclear, and process safety is described in this chapter. Compliance with 10 CFR 830, Subpart A and 10 CFR 835 is discussed respectively in Section 2.2, "Compliance with 10 CFR 830, Subpart A, 'Quality Assurance' " and Section 2.3, "Compliance with 10 CFR 835, 'Occupational Radiation Protection'".
<b>Question/Comment:</b>  10 CFR 830 has been extensively revised since the last general revision of the ISMP. This revision of the ISMP updates references to the quality assurance aspects of the rule, however, new requirements of 10 CFR 830 have not been addressed. 10 CFR 830 and 10 CFR 830 Subpart B establishes requirements that "relate to radiological, nuclear, and process safety." Why isn't compliance with 10 CFR 830 Subpart B addressed in Section 2.0 (or elsewhere) in the ISMP? Why isn't compliance with applicable elements of 10 CFR 830 (e.g., 10 CFR 830.6 and 830.7) addressed?
<b>Explanation/Discussion:</b> Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-021 RESPONSE:**

The ISMP updates did not include specific reference to the 10 CFR Part 830, Subpart B. There is only a general reference in the WTP contract that compliance is required with the 10 CFR 800 series of requirements. As this specific Subpart B of the Nuclear Safety Management Rule is a key area of compliance, specific reference to compliance with Subpart B needs to be added.

The ISMP SAP ABCN will be revised to propose this update. A revision to ISMP Section 2.2, that currently addresses compliance with 10 CFR 830 Subpart A for Quality Assurance Requirements, will be expanded to also address compliance with 10 CFR Part 830 in general, as well as with Subpart B specifically.

The ISMP SAP ABCN will be revised to propose this update to Section 2.2. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 2.2 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-022
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-98-06, <i>Corrective Action/Enforcement Action Program Description</i> 3. 10 CFR 820, <i>Procedural Rules for DOE Nuclear Activities</i>
<b>Cited Submittal Text:</b> Section 2.5, Compliance with 10 CFR 820 Section 10.4.2, DOE Corrective Action/Enforcement Program
<b>Question/Comment:</b> These sections of the ISMP do not clearly describe BNI's process for identifying, reporting, and correcting noncompliances with DOE nuclear safety requirements as described in RL/REG 98-06. Accordingly, provide the following information:  (a) Will BNI assign a PAAA Coordinator? If so, what is the reporting relationship of the PAAA Coordinator? (b) How will noncompliance reporting be accomplished? Will noncompliances be reported through the ORP PAAA Coordinator and the DOE noncompliance tracking system (NTS)? If not, what means will be used? (c) What screening criteria will be used to determine which noncompliances are reported to DOE? (d) How will noncompliance reports be reviewed and approved by BNI? (e) How will corrective actions be formulated, tracked, and closed, including coordination with DOE?
<b>Explanation/Discussion:</b> Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-022 RESPONSE:**

ISMP Section 2.5 was not intended to include the level of detail reflected in this question, in discussing Price-Anderson Amendments Act (PAAA) program implementation for the Project, but rather is intended to describe the program at a higher level.

The WTP Project PAAA program is described in the Project procedure 24590-WTP-GPP-QA-101, *Price Anderson Amendments Act Compliance and Reporting* (PAAA Procedure).

The information requested in Question/Comment 22, items (a) through (e) is detailed in this Procedure, which will be referred to for a more comprehensive response to these questions.

A summary level response to the detailed information requested in this question, directly replying or referring to where this information is detailed in the Project PAAA Procedure, follows.

- (a) Will BNI assign a PAAA Coordinator? If so, what is the reporting relationship of the PAAA Coordinator?

Dennis W. Murphy is the BNI WTP Project PAAA Coordinator. Under the Responsibilities section, the PAAA Procedure states the PAAA Coordinator "Reports to the BNI Manager of Quality Assurance and Project Manager as appropriate, to ensure independence." (Re: Procedure Item 3.2.3).

- (b) How will noncompliance reporting be accomplished? Will noncompliances be reported through the ORP PAAA Coordinator and the DOE noncompliance tracking system (NTS)? If not, what means will be used?

The PAAA procedure describes the reporting procedure. Noncompliances will be entered into the DOE PAAA Noncompliance Tracking System (NTS) and the ORP PAAA Coordinator will be notified of any NTS reportable non-compliances. The noncompliance reporting process is detailed in Section 3.5 of the Procedure. This section denotes the process used for reporting to the PAAA Coordinator and the interface with the NTS.

- (c) What screening criteria will be used to determine which noncompliances are reported to DOE?

Screening criteria are from the document DOE Office of Enforcement and Investigation (EH-10), Operational Procedures, Identifying, Reporting, and Tracking Nuclear Safety Noncompliances, June 1998. The screening criteria for PAAA evaluation are presented in the guidelines and criteria found in Appendix C of the Procedure.

- (d) How will noncompliance reports be reviewed and approved by BNI?

Potential PAAA non-compliance reports are developed by the BNI PAAA Coordinator and presented to the BNI PAAA Review Board (PRB), which consists of BNI WTP senior managers. The PRB recommends reportability to the Project Manager. The Project Manager makes the determination on reporting. Review and approval of noncompliance reports is detailed in Procedure section 3.5, as well as noted in Appendix A of the Procedure, PAAA Process flowchart, and Appendix B of the Procedure, Guidelines for PAAA Processing.

- (e) How will corrective actions be formulated, tracked, and closed, including coordination with DOE?

Internal to BNI, the corrective action process will be utilized to track PAAA noncompliances to closure. Changes to corrective actions or information will be also maintained in NTS. When the corrective actions have been completed and verified, the appropriate information will be entered in NTS and the EH-10 process will be followed for closure. The process for implementing corrective actions is detailed in Procedure section 3.5, as well as noted in the Appendix A of the Procedure, PAAA Process flowchart, and Appendix B of the Procedure, Guidelines for PAAA Processing.

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Rev. 0, be approved, with no proposed changes to these sections.



**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-023
<b>Cited Reference:</b>  1. DOE/RL-96-0006, Section 4.1.3, <i>Authorization Basis</i> 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b>  Section 3.3, Authorization Basis Section 9.2, Scheduling of Events for Regulatory Submittals
<b>Question/Comment:</b>  ISMP Section 9.2 was revised and now outlines various construction phase authorization requests that BNI intends to submit and certain documentation that will be submitted in connection with these requests. The description of the authorization basis in Section 3.3 of the ISMP does not describe the authorization basis in terms of this documentation throughout the WTP construction phase. Explain how the authorization basis description and change process described in Section 3.3 of the ISMP is consistent with Section 9.2 of the ISMP.
<b>Explanation/Discussion:</b> Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-023 RESPONSE:**

The ISMP Section 3.3.1.3 on safety analysis reports needs to be updated to reflect the use of the Limited Construction Authorization Request (LCAR), the Preliminary Safety Analysis Report for Partial Construction Authorization (PCAR), and the phased submittals of the Preliminary Safety Analysis Report (PSAR) for the Construction Authorization (CAR). The ISMP sections on control of the Authorization Basis and changes to the Authorization Basis do apply for maintenance of these versions of safety basis documentation, so no revision is needed for those sections.

The ISMP SAP ABCN will need to be revised to propose this update to Section 3.3.1.3. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 3.3.1.3 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-24
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, Table S7-1, <i>Construction Occurrence Reporting Plan</i> 2. Limited Construction Authorization Request, <i>Construction Occurrence Reporting Plan for Limited Construction</i>
<b>Cited Submittal Text:</b> Section 3.16.3, Incident Investigations
<b>Question/Comment:</b>  <p>A Construction Occurrence Reporting Plan is required for construction authorization regulatory actions by Table S7-1 of the BNI contract. Such a plan was submitted by BNI in connection with the Limited Construction Authorization Request. The plan was approved by the OSR and is incorporated in the authorization basis for limited construction. The reporting discussion in Section 3.16.3 of the ISMP does not describe implementation of the Construction Occurrence Reporting Plan.</p> <p>a. How and when will the Construction Occurrence Reporting Plan be submitted in connection with the construction authorization request?</p> <p>b. Will the Construction Occurrence Reporting Plan be revised for the Construction Authorization Request?</p> <p>c. Also, there are a number of references to "incident reporting" processes in the ISMP. Are the "incident reporting" processes referred to in the ISMP equivalent to the occurrence reporting process described in the Construction Occurrence Reporting Plan? If not, explain "incident reporting."</p>
<b>Explanation/Discussion:</b> Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-024 RESPONSE:**

The construction occurrence reporting process will be initiated with the start of construction. The details of the process for occurrence reporting can be found in the Project procedure 24590-WTP-GPP-SIND-001A, *Reporting Occurrences in Accordance with DOE Order 232.1A*.

Update to Section 3.16.3 is proposed to clarify that this ISMP section is describing the Occurrence Reporting and Incident Investigation process to be used by the Project. This update can indicate that occurrence reporting will be initiated during the Construction phase of the Project. The ISMP revision will also clarify the timing and approach for development and implementation of occurrence reporting, noting how this process will be applied and updated when going from construction to commissioning to operation phases of the Project.

This update will also clarify that incident investigation is not equivalent to occurrence reporting, but rather is a related activity. The similar phased implementation of incident investigation during the various phases of the Project will be discussed.

The ISMP SAP ABCN will need to be revised to propose this update to Section 3.16.3 to clarify the Project process for occurrence reporting. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 3.16.3 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Date:</b> 09/26/01	
<b>Question/Comment No.:</b> 01-ISMP-25	
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>	
<b>Cited Submittal Text:</b> ISMP Section 4.1.1, Item 4 Was: Documents that the facility design meets the required Safety Criteria and documents how and why the engineered and administrative controls credited for public and worker safety were identified. <u>In Part B</u> , when policies and procedures are written to implement the administrative controls, these policies and procedures will be identified in the SRD. Changed to: Documents that the facility design meets the required Safety Criteria and documents how and why the engineered and administrative controls credited for public and worker safety were identified. <u>During commissioning</u> , when policies and procedures are written to implement the administrative controls, these policies and procedures will be identified in the SRD.	
<b>Question/Comment:</b> The proposed change alters a commitment regarding when specific information will be added to the SRD. Under the existing commitment, any "policies and procedures" that implement "administrative controls credited for public and worker safety" would be incorporated in the SRD during the detailed WTP design process preceding the submittal of the Construction Authorization Request. Under the revised commitment, this information will be incorporated in the SRD sometime during the commissioning phase of the project. The rationale and basis provided for the change does not address this impact on the original commitment. What is the basis for determining that this proposed change is not a reduction in commitment, or alternatively, why is ISMP acceptable with such a change? Also, the rationale provided for this proposed change states that the change "Clarifies when types of polices and procedures will be identified, rather than an explicit list of this documentation." This statement is unclear. What "explicit list" of documentation is being referred to? How does the proposed change relate to the list?	
<b>Explanation/Discussion:</b> Not Provided	

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-025 RESPONSE:**Discussion:

“Part B” as referred to in the text of the ISMP no longer exists as part of the current contract (Contract No. DE-AC27-01RV14136). As a result of the ISM Process [per SRD Volume II, Appendix A, Section 4.8, “Identification of Potential Controls” and Section 5.0, “Development of Control Strategies”], potential hazard controls are identified during all the phases of the WTP design, including the detailed design phase of the project proceeding the submittal of the CAR. However, administrative controls that will become part of each facility's technical safety requirements, will not be finalized until completion of this detailed design phase. The policies and procedures necessary to implement these administrative controls will be developed and finalized as necessary to implement these required administrative controls.

Because it is not envisioned that the intent of this sentence in the ISMP is to add policies or procedures to the SRD, the contractor is trying to clarify the requirement. The “explicit list” referred to in the rationale was trying to clarify that an “explicit list” that is, the listing of policies and procedures in the SRD, would not occur. Rather the types of policies or procedures (for example the Defense-in-Depth approach to be used by the project as added to the SRD as Appendix B) would be added to the SRD as necessary.

Proposed Resolution:

Revise the Basis/Rationale for Proposed Revision to:

"Part B" as referred to in the text of the ISMP no longer exists as part of the current contract (Contract No. DE-AC27-01RV14136) with BNI. As a result of the ISM Process [per SRD Volume II, Appendix A, Section 4.8, “Identification of Potential Controls” and Section 5.0, “Development of Control Strategies”], potential hazard controls are identified during all the phases of the WTP design, including detail design phase of the project proceeding the submittal of the CAR.

However, administrative controls, that will become part of each facility's technical safety requirements, will not be finalized until completion of this detailed design phase. The policies and procedures necessary to implement these administrative controls will be developed and finalized as necessary to implement these required administrative controls. This revision clarifies that the policies and procedures necessary to implement administrative controls will be finalized during the commissioning phase of the WTP Project.

The ISMP SAP ABCN will need to be revised to propose this update to Section 4.1.1 This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 4.1.1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-26
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> ISMP Section 3.4, Safety/Quality Culture  ...the WTP contractor establishes measurable goals in the areas of radiological and chemical exposure limits for the public and workers, and environmental <u>radiological</u> release limits. The WTP contractor then establishes policies that require the communication of the goals to employees and contractors.
<b>Question/Comment:</b>  The second paragraph of Section 3.4 of the ISMP commits to establishing goals related to radiological and chemical exposures and releases. The proposed change alters the "environmental release" to read "environmental radiological release" in Section 3.4. This proposed change appears to eliminate a commitment to establishing environmental release goals related to process chemicals. The rationale and basis provided for the change does not address this impact of the proposed change. What is the basis for determining that this proposed change is not a reduction in commitment, or alternatively, why is ISMP acceptable with such a change? Also, the second paragraph of Section 3.4 uses the term "limits" in discussing the establishment of exposure and release goals. This makes the text confusing. Why does the term "limits" appear in the discussion of establishing exposure and release goals?
<b>Explanation/Discussion:</b> Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-026 RESPONSE:**

The SRD Sections 5.3, “Environmental Radiation Protection” and 5.4, “Environmental Radiological Monitoring” deal specifically with the radiological aspects of environmental protection and monitoring. The word “radiological” was added to clarify that the environmental release limits covered by the Authorization Basis are radiological. This does not represent a reduction in commitment as it clarifies specific requirements for environmental radiological protection identified in the SRD and does not remove any commitment. Specific environmental requirements applicable to the WTP are identified in the regulations or as permit conditions established by the regulators, primarily the Washington Department of Ecology, Washington Department of Health, and Environmental Protection Agency. These agencies provide oversight to ensure that the requirements are complied with.

The term “limits” is part of the previously approved text. The goals are intended to be set relative to the limits that are established by regulation.

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Revision 0, be approved for the proposed change to Section 3.4.



**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-027
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> Section 1.3.16, pg. 1-23, next to last paragraph Personnel responsible for performing each of the above-listed aspects of configuration management meet minimum qualification requirements for the particular position being filled. For example, ES&H personnel meet the minimum requirements for environmental or safety duties. In addition, personnel involved in the change management process receive training specific to that program. The specific qualification requirements are established during commissioning. The SRD provided the training and qualification standards for RPP-WTP personnel.
<b>Question/Comment:</b> What is the justification for not requiring the specification of qualification requirements for personnel performing configuration management tasks before commissioning of the facility?
<b>Explanation/Discussion:</b> The prior revision stated that these qualification requirements would be established during Part B. The Attachment 2 justification is that this change reflects a global change from "Part B" references to replace that privatization term. This does not provide a technical justification for the adequacy of the requirement.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL****QUESTION/COMMENT NO. 01-ISMP-027 RESPONSE:**

This paragraph is superseded by 24590-ABCN-ESH-01-011 (ABCN 11), *Incorporate Changes to Reflect Revision of Configuration Management Plan and Compliance with ISO 10007*. ABCN 11 was approved internally 6 September 2001 and the ISMP page changes generated by ABCN 11 were submitted to the DOE Office of River Protection (ORP) 01 October 2001 (CCN 022761). The Office of Safety Regulation (OSR) reviewed ABCN 11 and communicated comments to WTP ES&H and Engineering staff in a meeting 24 October 2001. The OSR comment on this paragraph concerned what appeared to be a reduction in commitment, where CM-qualified individuals were not required for performing CM change reviews under the CM process. WTP explained that CM training was covered in a subsequent section added by ABCN 11 and agreed to strengthen the ABCN safety evaluation to explain equivalency and no reduction in commitment.

The added section 1.3.16.7, *Training*, explains that training includes a description of the CM Program, reasons why the program is used, the elements of configuration management, and how the CM Program is implemented on the project. It also explains that CM Training is part of the Safety and Quality Design Required Training and is required before personnel are placed on the List of Qualified Individuals (LQI). Thus, personnel involved in change reviews or configuration management tasks receive CM training before they can perform those tasks. Training to the CM Program and change control elements of the CM Program are intended to apply throughout the life cycle of the WTP. In response to another OSR comment, section 1.3.16 will be revised to clarify life cycle application of configuration management throughout design, construction, commissioning, operation, and deactivation. The intent is not to begin qualification during commissioning.

The ISMP SAP ABCN will need to be revised to reflect the retraction of this proposed change to Section 1.3.16. Based on OSR concurrence with this additional information, it is requested the ABCN-24590-01-00008, Revision 1 be approved, with no proposed changes to these sections from the SAP submittal.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-28
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i> 3. 24590-WTP-SRD-ESH-01-001-02, <i>Safety Requirements Document</i> , Safety Criterion 9.2-3
<b>Cited Submittal Text:</b> Section 3.3.1.4, pg. 3-6 The TSRs, approved prior to start of operations, will be maintained current so that they reflect the RPP-WTP as it is analyzed in the FSAR. They include items in the following categories, as necessary: 1) Safety limits 2) Limiting conditions for operation 3) Surveillance requirements.
<b>Question/Comment:</b> Why is the proposed inclusion of "as necessary" in the above proposed ISMP text acceptable, given that the SRD (Safety Criterion 9.2-3) contains no such qualifying language? SRD Safety Criterion 9.2-3, which references Section 3.3.1.4 of the ISMP as an Implementing Code or Standard, states that TSRs shall consist of the following (among others): 1) Safety Limits (SLs) 2) Limiting Conditions for Operation (LCOs) 3) Surveillance Requirements SRD Safety Criterion 9.2-3 contains no language relative to these items being part of the TSRs "as necessary." Thus, the proposed ISMP change is inconsistent with the SRD.
<b>Explanation/Discussion:</b> Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-028 RESPONSE:**

To maintain consistency with the SRD, the phrase “as necessary” will be retracted from the proposed ISMP changes. The intent of this clarification was to denote that Safety Limits would be provided if they are needed to support the safety basis controls reflected in the Technical Safety Requirements (TSR). However, this approach equally applies for all other elements of the TSRs (e.g., Limited Conditions of Operations, Administrative Controls, Design Features), so there is no specific need to single out Safety Limits in the description on TSR development.

The ISMP SAP ABCN will need to be revised to reflect the retraction of this proposed change. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 3.3.1.4 retraction would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-29
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> Section 3.11, pg. 3-24 The following hierarchy of safety measures is incorporated into the RPP-WTP design.  1) Operational Preventive Measure (OPM) is a corrective action taken by an operator to terminate the development of a fault sequence. Examples include operator responses to system parameters, sampling and chemical analyses, control system indications or alarms, and procedural instructions. An OPM is considered the first line of protection against a hazard under normal facility operating conditions. Should the OPMs fail, protective systems and devices are designed to automatically operate. 2) Engineered Protection Systems operate automatically to prevent a hazard from occurring, and generally use hardwired trips, mechanical devices, or programmable electronic systems (such as programmable logic controllers) commensurate with the potential risk of the hazardous situation. If protective measures fail, a hazardous situation may occur, the consequences of which can be reduced by the action of mitigating systems. 3) Mitigating Systems attenuate the consequence of a hazardous situation once it has occurred. They include ventilation systems, radiological alarm systems, and evacuation systems.
<b>Question/Comment:</b> What is the technical justification for the deletion of this text from the ISMP? Where is the redundant information contained in the ISMP and why is the deleted information not pertinent to the subject of safety systems design? If the information is not discussed elsewhere in the ISMP, explain why this reduction in commitment is appropriate, or alternatively, why the ISMP is acceptable without this description. The Attachment 2 justification is that this deletion removes redundant information unnecessary to the understanding of this section. This justification is inadequate.
<b>Explanation/Discussion:</b> The Attachment 2 justification is that this deletion removes redundant information unnecessary to the understanding of this section. This justification is inadequate.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-029 RESPONSE:**

As Question/Comment 01-ISMP-009 and Question/Comment 01-ISMP-029 cover the same issue, response to Question/Comment 01-ISMP-009 addresses this Question/Comment 01-ISMP-029.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-30
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> Section 3.16.5, pg. 3-39, including the ten items (performance monitoring areas) listed Performance monitoring for radiological, nuclear, and process safety is conducted by RPP-WTP quality assurance, process safety, health physics, nuclear safety, and regulatory staff.
<b>Question/Comment:</b> Why is the deletion of a "multidisciplinary team" including environmental protection and industrial safety not a reduction in commitment?
<b>Explanation/Discussion:</b> The current ISMP states that "Performance monitoring is conducted by a RPP-WTP multidisciplinary team consisting of quality assurance, environmental protection, industrial safety, process safety, health physics, nuclear safety, and regulatory staff." The Attachment 2 justification for this change is that it clarifies the scope of these Performance Indicators and clarifies the list of examples. This goes beyond clarification. It is a reduction in commitment by removing the requirement for a multidisciplinary team that includes membership representing environmental protection and industrial safety.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-030 RESPONSE:**

The conduct of performance monitoring is provided by the various WTP organizations and departments. These groups include individuals from different, multi-discipline backgrounds; however, there is not a single “multi-disciplinary team” established for the Project that supports performance monitoring. Instead, functional areas monitoring is provided by the individual organizations in their subject matter areas.

While the areas of industrial safety and environmental protection were removed from the ISMP description, as these are outside the ISMP radiological, nuclear, and process safety scope, the conduct of performance monitoring is provided in these areas as well. The broader implementation of the Integrated Safety Management System (ISMS) will pick up these industrial safety and environmental protection areas performance monitoring as part of its Feedback and Improvement core function.

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Revision 0, proposed change to this ISMP Section 3.16.5 be approved.



**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-31
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> Section 4.1.3, pg. 4-5 In addition, the consensus codes and standards in the SRD are used in the design of SSCs, as linked to SRD Safety Criteria. This link is implemented through Project documents like the Design Input Memorandum. These links are controlled to ensure that configuration management of the linkage to the SRD is maintained at all times.
<b>Question/Comment:</b> Why is the deletion of the text describing the additional project-specific guidance and specifications for topical areas and individual systems and areas of the facility provided via design guides not a reduction in commitment? What will replace the Design Guides from a configuration management and linkage to the SRD perspective?
<b>Explanation/Discussion:</b> The existing ISMP states "In addition, the consensus codes and standards used in the design of SSCs are linked to SRD Safety Criteria. This link is implemented through Project documents like the Design Input Memorandum. Design guides provide additional detailed project-specific guidance and specifications for topical areas (e.g., radiation protection, human factors, natural phenomena design) and individual systems and areas of the facility (e.g., process ventilation system, melter cell walls, process offgas). All of these links are controlled to ensure that configuration management of the linkage to the SRD is maintained at all times." The Attachment 2 justification for this proposed change is that the project is moving away from the use of Design Guides. This represents a reduction in commitment. In typical nuclear industry practice, documents like "design guides" would form the basis for development of "System Descriptions" or "Design Basis Documents", which would be valuable controlled references for later use by system/design engineers when facility modifications and changes to the licensing bases of the facility are considered/implemented. The adequacy of using the Design Input Memorandum without the additional details provided in the design guides must be justified from a scope, control, and topical/system alignment perspective.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-031 RESPONSE:**

The use of Design Guides in the development of the WTP design was an supporting approach, as these Design Guides provided non-mandatory approaches for meeting requirements. The Design Guides were not requirements documents and were not construed as requirements in assessment for compliance with Project safety or design requirements.

The development of the design information that is presented in Design Input Memoranda, (DIMs) is, however, based on meeting the requirements for design that are specified in the Safety Requirements Document (SRD) and other AB documents (e.g., RPP, ISMP), as well as design requirements provided in the Design Criteria Database. Compliance with these design requirements ensures that safety basis requirements are met. This compliance is not dependent on following the non-mandatory approaches provided in the Design Guides.

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Revision 0, proposed change to this ISMP Section 4.1.3 be approved.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-32
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> Section 4.1.4, pg. 4-5 Safety Management Programs will be scrutinized and revised, as appropriate, as a part of the SRD revision process. This revision process incorporates updated hazards and design information as well as potential new regulatory requirements. These SRD revisions will ensure that the safety management programs are appropriately tailored to the hazards posed by the facility and comply with laws, regulations, and contractual commitments.
<b>Question/Comment:</b> Why is the deletion for biannual revision of the SRD from the above cited text not a reduction in commitment?
<b>Explanation/Discussion:</b> The existing ISMP includes the word "biannual" before "SRD" in the first sentence and again refers to a biannual review in the last sentence. The Attachment 2 justification for this proposed change is that it reflects the project practice of continual SRD maintenance, in compliance with DOE/RL-96-00006 and conformance with RL/REG-97-13 to provide continual maintenance of AB documents. This is an incorrect justification. The contractor is indeed bound by the continuous AB maintenance requirements as defined in DOE/RL-96-0006 and RL/REG-97-13 and implemented using the ABCN process. However, this ISMP requirement reflects the need for the contractor to review and "clean-up" the SRD on a biannual basis to pick up the small changes that did not trigger the DOE review and approval requirements from RL/REG-97-13. This is the normal AB document maintenance process; continuous changes as necessary, and periodic updates to pick up other required changes.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-032 RESPONSE:**

The requirements for maintenance of the SRD, as required in ISMP section 3.3.3 and in SRD Volume I, entail a continuous assessment of the need to update the SRD to reflect Project safety requirements based on changes to Project design, construction, or commissioning approaches. This real-time evaluation for SRD update is part of the on-going Authorization Basis maintenance provided to keep the SRD current with Project changes. This is intended to pick up, not only the changes that require DOE review and approval, but also the changes that the Contractor proposes and approves without the need for DOE approval. This is reflected in the Project procedure for Authorization Basis maintenance and in the practice of keeping the SRD aligned with the design basis.

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Revision 0, proposed change to this ISMP Section 4.1.4 be approved.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-33
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> Section 5.5, pg. 5-7 The PHA is performed in accordance with the requirements of Project procedures. This includes establishment of personnel training and qualification requirements, confirming that personnel met these requirements, application of management reviews, and documentation of results.
<b>Question/Comment:</b> How do Project procedures ensure adequate retention (i.e., for the life of the process) of process hazard analysis records, including updates, revalidations, and the documented resolution of any recommendations? Why is the proposed change not a reduction in commitment in that the current ISMP commits to performance of the PHA in accordance with the applicable project QA requirements?
<b>Explanation/Discussion:</b> SRD Safety Criterion 3.1-8 requires that employers shall retain process hazards analyses and updates or revalidations as well as the documented resolution of any recommendations for the life of the process. The existing ISMP (Section 5.5) states that the PHA is performed in accordance with the requirements of the Project QAP. The QAP (now the QAM) contains retention requirements for project records (in general, not specifically those associated with the PHA). The intent of the existing ISMP appears to have been to invoke the applicable QA requirements into the project PHA. The proposed change from the QAP (QAM) to undefined project procedures eliminated the ISMP commitment to perform the PHA in accordance with applicable project QA requirements. Based on the submittal, there is no way for OSR to confirm that the undefined project procedures are consistent with the requirements of SRD SC 3.1-8.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-033 RESPONSE:**

Although all Project procedures are implemented in accordance with the Project QAM, to further clarify that QA requirements are met for conduct of the PHA process, the ISMP text will be updated to explicitly state that PHA is performed in accordance with the project QA requirements specified in the QAM.

The ISMP SAP ABCN will need to be revised to reflect the addition of this explicit point and update Section 5.5. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 5.5 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-34
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii) 2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i>
<b>Cited Submittal Text:</b> Table 8-1, pg. 8-3 Table 8-1 entry dealing with the subject of "Environmental Protection"
<b>Question/Comment:</b> Since environmental protection can involve radiological, nuclear and/or process safety, why doesn't the deletion of "Environmental Protection" from the table of Safety Management Records (Table 8-1) represent a reduction in commitment?
<b>Explanation/Discussion:</b> The Attachment 2 justification for this deletion is that this subject is outside the radiological, nuclear, and process safety scope of the ISMP. Given that environmental protection can involve radiological, nuclear and/or process safety considerations, this is not an acceptable justification for this proposed change.
<b>QUESTION/COMMENT NO. 01-ISMP-034 RESPONSE:</b>  Recommend revising table entry to read "Environmental Radiological Protection" instead of deleting. This maintains consistency with the position taken in comment Item 01-ISMP-026  Revise table entry to read "Environmental Radiological Protection" instead of deleting, since radiological aspects of environmental protection are covered by the SRD. Delete "Environmental Report" from record list as it is not a document required under the contract, and therefore, this will not exist as a record. Add "radiological" to the other record descriptions to clarify that these are the specific records that are related to the Authorization Basis. This does not represent a reduction in commitment as it clarifies the specific requirements identified in the SRD and does not remove any commitment. Specific environmental records and recordkeeping requirements are identified in the regulations or as permit conditions established by the regulators, primarily the Washington Department of Ecology, Washington Department of Health, and EPA. These agencies provide oversight to ensure that the requirements are complied with by the WTP Project.  The ISMP SAP ABCN will need to be revised to reflect the addition of this information to update Section 8, Table 8-1 This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 8, Table 8-1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-035
<b>Cited Reference:</b> 1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2. RL/REG-97-13, Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis
<b>Cited Submittal Text:</b> ISMP section 3.16.5, "Performance Monitoring:" Performance monitoring is conducted to ensure high standards of performance in the following areas: 1) Conduct of operations and maintenance <u>(during operations)</u>
<b>Question/Comment:</b> The change inserted the underlined, parenthetical phrase to clarify the applicability of "conduct of operations and maintenance" performance monitoring to the "operations phase" of the project. This clarification now excludes performance monitoring from the "commissioning phase," which will be the first time that the conduct of operations and maintenance processes/procedures are implemented during pre-operational testing. What is the basis for performance monitoring not being applied to conduct of operations and conduct of maintenance during the commissioning testing of the construction phase of the project to ensure high standards of performance in these areas during pre-operational testing? What is the safety evaluation of this change?
<b>Explanation/Discussion:</b> Not Provided



**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-035 RESPONSE:**

The particular point the DOE commenter is keyed to is whether performance monitoring would also be provided during the commissioning test phase of the Project.

Contract Section C, Table S7-1, notes that Authorization Basis documentation (including TSRs) is to be approved and in place to support hot commissioning. This leads to the conclusion that associated Authorization Basis programmatic controls are implemented (presumably including performance monitoring) at that time. Based on that, the need to establish and implement performance monitoring on operations and maintenance activities needs to be established, as a function of hazards associated with these WTP activities.

Since hot commissioning represents a subset of hazards associated with production authorization operation, it seems appropriate that performance monitoring graded to these hazards is to be implemented with the start of hot commissioning.

The revision to the ISMP for this text entry is proposed to be revised to:

Performance monitoring is conducted to ensure high standards of performance in the following areas:

- 1) Conduct of operations and maintenance (beginning with hot commissioning)

The ISMP SAP ABCN will need to be revised to reflect the addition of this explicit point and update Section 3.16.5. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 3.16.5 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**Additional discussion between the Project Contractor and the DOE OSR are appropriate to address Project commitment to conduct of Performance Monitoring, based on contractual, regulatory, and safety requirement drivers, as well as added value to the Project. This follow-on discussion is outside the scope of the ISMP SAP submittal.**

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-036
<p><b>Cited Reference:</b></p> <ol style="list-style-type: none"> <li>1. Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii).</li> <li>2. RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i></li> </ol>
<p><b>Cited Submittal Text:</b></p> <p>ISMP section 4.2.3.4, "Technical Safety Requirements" (focus of question), ISMP section 3.14, "Commissioning and Operations" (secondary reference).</p> <p>ISMP section 3.14, "Commissioning and Operation," states in part that, "When systems have sufficiently demonstrated their ability to function, process operation may begin. A series of system performance demonstrations (SPD's) are typically performed to commission new facilities, and the number of SPD's depends on the function of the facility and materials handled. For the RPP-WTP, the following four levels of SPD are demonstrated:</p> <ol style="list-style-type: none"> <li>1) Process systems using water (cold test)</li> <li>2) Mechanical handling systems (cold test)</li> <li>3) Facility operation using simulants (cold test)</li> <li>4) Facility operation using active materials (hot test)</li> </ol> <p>ISMP section 4.2.3.4, "Technical Safety Requirements," states in part that, "The TSR's, <u>effective during operations and deactivation, will be based on the FSAR, accident analysis assumptions, and any facility-specific commitments made.</u>"</p>
<p><b>Question/Comment:</b></p> <p>The change to section 4.2.3.4 that makes TSR's effective during operations and deactivation excludes the commissioning phase from TSR implementation. Because the latter part of the commissioning phase includes "hot testing," the TSR's must be implemented and complied with during such testing.</p> <ol style="list-style-type: none"> <li>a) Provide the basis for not developing and implementing TSR's the commissioning testing of the project to ensure that "hot testing" is performed pursuant to the conditions, safe boundaries, and management or administrative controls necessary to ensure the safe operation of the facility?</li> <li>b) If TSR's are not going to be utilized for the commissioning of the facility, explain the controls that will be used during this testing which are equivalent to the development and implementation of TSR's.</li> <li>c) What is the safety evaluation of this change?</li> </ol>
<p><b>Explanation/Discussion:</b></p> <p>Not Provided</p>

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-036 RESPONSE:**

From review of the Contract, specifically the timing of deliverables in the contract Section C Table S7-1, it was recognized that TSRs are to be approved prior to start of hot commissioning.

This proposed changes in ISMP Section 4.2.3.4 needs to be revised to reflect this timing for TSR approval and implementation to support hot commissioning.

The ISMP SAP ABCN will need to be revised to reflect the change of the ISMP Section 4.2.3.4 text to read:

“The TSR’s, effective during Hot Commissioning, Operations, and Deactivation, will be...”

The ISMP SAP ABCN will need to be revised to reflect the addition of this explicit point and update Section 4.2.3.4. This proposed ABCN change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 4.2.3.4 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

<b>Question/Comment No.:</b> 01-ISMP-037
<b>Cited Reference:</b> 1) Contract No. DE-AC27-01RV14136, Section C, Standard 7, paragraph (e)(2)(iii). 2) RL/REG-97-13, <i>Office of Safety Regulation Position on Contractor-Initiated Changes to the Authorization Basis</i> 3) SRD Appendix B Sections 4.3-6, 4.3-7 4) DOE/RL-96-0006 Sections 4.2.6.1 to 4.2.6.3
<b>Cited Submittal Text:</b> ISMP section 3.21.3, "Strategy for the reduction of human error" The operations addressed include all those that are directly associated with the control and monitoring of the facilities. The types of operations human factors encompasses includes normal operations, maintenance (breakdown and planned), start-up operations and shutdown operations (both 'controlled' and emergency).
<b>Question/Comment:</b>  The above text was newly added to the referenced section of the ISMP and excludes application of human factors (HF) to "anticipated occurrences" and "accident conditions." Appendix B of the SRD states that HF engineering (HFE) shall be conducted in accordance with IEEE Std 1023-1988 as tailored to the work and hazards of the RPP-WTP. Appendix B also mandates formal consideration of HFE techniques and methodologies recommended in the subordinate standard to hazards of severity levels SL-1 and -2. The newly added text appears to be a reduction in commitment.  (a) Provide the basis for the exclusion of "anticipated occurrences" and "accident conditions" from operations. (b) What is the safety evaluation for this change?
<b>Explanation/Discussion:</b> Not Provided

**WTP PROJECT RESPONSE TO DOE OSR QUESTIONS ON ISMP SAP SUBMITTAL**

**QUESTION/COMMENT NO. 01-ISMP-037 RESPONSE:**

The text in ISMP Section 3.12.3 on human factors addresses “anticipated occurrences” in the citing of operations human factors encompassing normal operations (when anticipated occurrences take place). It also addresses “accident conditions” in citing operations human factors encompassing controlled and emergency shutdown operations (when accident conditions exist).

Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008, Revision 0, proposed change to this ISMP Section 3.12 be approved. A Revision 1 update to ABCN-24590-01-00008 will include the information in this response in its Attachment 2. The ISMP Section 3.12 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.

## Integrated Safety Management Plan Proposed SAP Revisions – Early Approval Request Items

ISMP Section No./ Title [Rev. <b>6c</b> Page No.(s)]	Section Topic	Assessment Concern/Proposed Disposition in Early Approval <b>STATUS OF REQUESTED EARLY APPROVAL, BASED ON RESPONSE TO OSR QUESTIONS ON SAP SUBMITTAL</b>
3.16.1.1 WTP Executive Committee [3-35]	Executive Committee	<p>Committee requirements are not met. A Deficiency Report on this requirement was submitted to QA.</p> <p><b>Rewording proposed in ISMP SAP to provide corporate safety oversight function.</b></p> <p><b>This topic is addressed by OSR Question 01-ISMP-001; ABCN revision not required, Early Approval <u>Still Requested</u> on changes associated with this question:</b></p> <p>Based on OSR concurrence with this additional information, it is requested the original ABCN-24590-01-00008 Revision 0 proposed change to this ISMP Section 3.16.1.1 be approved. An update to the original ISMP wording to remove reference to an “Executive Committee” in ISMP Section 3.16.1 will be provided in a Revision 1 update to ABCN-24590-01-00008. This ABCN update will include the additional Section 3.16.1 proposed change, as well as information in this response, in its Attachments 1 and 2. The ISMP Section 3.16.1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>
11.1 Design, Construction, and Commissioning Contractor Organization Roles, Responsibilities, and Authorities [11-2]	Project Manager Roles, Responsibilities, and Authorities, Item 7)	<p>The PM does not serve as a member of the Executive Committee, as this committee does not currently exist. A Deficiency Report on this requirement was submitted to QA.</p> <p><b>This topic is addressed by OSR Question 01-ISMP-002; ABCN revision required, Early Approval <u>Not Requested</u>:</b></p> <p>An update to the original ISMP ABCN-24590-01-00008 Rev. 0 wording to add the responsibility above will be provided in a Revision 1 update to ABCN-24590-01-00008. This ABCN update will include an additional Section 11.1 proposed change, as well as information in the response to Question 01-ISMP-002, in its Attachments 1 and 2. The ISMP Section 11.1 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>

**Integrated Safety Management Plan Proposed SAP Revisions –  
Early Approval Request Items**

<b>ISMP Section No./ Title [Rev. 6c Page No.(s)]</b>	<b>Section Topic</b>	<b>Assessment Concern/Proposed Disposition in Early Approval STATUS OF REQUESTED EARLY APPROVAL, BASED ON RESPONSE TO OSR QUESTIONS ON SAP SUBMITTAL</b>
3.16.2 Safety Improvement Program [3-37]	PSC developed and implemented safety improvement program	<p>Interpretation needed to clarify intent was for this section to be met during operations for radiological, nuclear, and process safety.</p> <p><b>Rewording proposed in ISMP SAP to clarify program applies during operations project phase.</b></p> <p><b>This topic is addressed by OSR Question 01-ISMP-003; ABCN revision required, Early Approval <u>Not Requested</u>:</b> An update to the original ISMP ABCN-24590-01-00008 Rev. 0 wording to describe the use of the Accident Prevention Council (APC) prior to start of hot commissioning will be provided in a Revision 1 update to ABCN-24590-01-00008. This ABCN update will include the additional Section 3.16.2 proposed change, as well as information in the response to Question 01-ISMP-003, in its Attachments 1 and 2. The ISMP Section 3.16.2 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>
3.16.5 Performance Monitoring [3-39]	Performance Monitoring	<p>Many items are during operations phase, so need to clarify scope and timing; No multidisciplinary teams in place, instead monitoring provide by individual organizations.</p> <p><b>Rewording proposed in ISMP SAP to clarify performance monitoring process scope, current approach, and timing.</b></p> <p><b>This topic is addressed by OSR Question 01-ISMP-030; ABCN revision not required, Early Approval <u>Still Requested</u> on changes associated with this question:</b> Based on OSR concurrence with additional information provided for question 01-ISMP-030, it is requested the original ABCN-24590-01-00008 Revision 0 proposed change to this ISMP Section 3.16.5 be approved</p> <p><b>This topic is addressed by OSR Questions 01-ISMP-015 and 01-ISMP-035; ABCN revision required, Early Approval <u>Not Requested</u> on changes associated with these questions.</b></p>

**Integrated Safety Management Plan Proposed SAP Revisions –  
Early Approval Request Items**

<b>ISMP Section No./ Title [Rev. 6c Page No.(s)]</b>	<b>Section Topic</b>	<b>Assessment Concern/Proposed Disposition in Early Approval STATUS OF REQUESTED EARLY APPROVAL, BASED ON RESPONSE TO OSR QUESTIONS ON SAP SUBMITTAL</b>
3.16.6 Performance Indicators [3-40]	Performance Indicators	<p>Examples of PIs, as written, are not clear when they apply.</p> <p><b>Rewording proposed in ISMP SAP to clarify examples apply during applicable project phase(s).</b></p> <p><b>This topic is was not addressed by OSR Questions; ABCN revision not required, Early Approval <u>Still Requested</u> on changes associated with this question</b></p>
3.16.7 Lessons Learned [3-40]	Project Lessons Learned	<p>Requirements, as written to have a “program”, are not clear.</p> <p><b>Rewording proposed in ISMP SAP to clarify general application of lessons learned, rather than a specific program.</b></p> <p><b>This topic is addressed by OSR Question 01-ISMP-004; ABCN revision required, Early Approval <u>Not Requested</u> on changes associated with this question:</b></p> <p>An update to the original ISMP ABCN-24590-01-00008 Rev. 0 wording to describe the Project-wide lessons learned process, including the engineering lessons learned system, will be provided in a Revision 1 update to ABCN-24590-01-00008. This ABCN update will include the additional Section 3.16.7 proposed change, as well as information in this response, in its Attachments 1 and 2. The ISMP Section 3.16.7 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>



## Integrated Safety Management Plan Proposed SAP Revisions – Early Approval Request Items

ISMP Section No./ Title [Rev. 6c Page No.(s)]	Section Topic	Assessment Concern/Proposed Disposition in Early Approval STATUS OF REQUESTED EARLY APPROVAL, BASED ON RESPONSE TO OSR QUESTIONS ON SAP SUBMITTAL
3.12 Human Factors [3-27 and 3-28]	Replace the text of this section in its entirety.	<p>Justification for revision of this entire section includes:</p> <ol style="list-style-type: none"> <li>1. Section was not entirely technically correct or proper</li> <li>2. Section contained some cultural (UK vs. USA) and corporate (BNFL vs. Bechtel) differences that no longer apply.</li> <li>3. Section was too narrowly focused</li> <li>4. Human factors responsibilities and commitments were not adequately explained nor delineated</li> <li>5. Section does not fully incorporate regulatory expectations</li> </ol> <p><b>Rewording proposed in ISMP SAP.</b></p> <p><b>This topic is addressed by OSR Questions 01-ISMP-005 and 01-ISMP-037; ABCN revision required, Early Approval <u>Not Requested</u> on changes associated with this question:</b></p> <p>Based on OSR concurrence with the additional information provided in response to these questions, it is requested the original ABCN-24590-01-00008 Revision 0 proposed change to this ISMP Section 3.12 be approved. A Revision 1 update to ABCN-24590-01-00008 will include the information in this response in its Attachment 2. The ISMP Section 3.12 change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>
8.0 Document Control and Maintenance Table 8-1 [8-3]	Delete Environmental Protection and Occupational Safety and Health rows	<p>Outside the radiological, nuclear, and process safety scope of the ISMP.</p> <p><b>Removal proposed in ISMP SAP.</b></p> <p><b>This topic is addressed by OSR Question 01-ISMP-034 ; ABCN revision required, Early Approval <u>Not Requested</u> on change associated with this question related to Environmental Protection (Early approval <u>still requested</u> on deletion of OS&amp;H item)</b></p> <p>The ABCN to be revised to reflect adding environmental information back to Section 8, Table 8-1. as noted in ABCN-24590-01-00008, Rev. 1. Table 8-1 change will be based on OSR approval of ABCN24590-01-00008, Rev. 1.</p>

**Integrated Safety Management Plan Proposed SAP Revisions –  
Early Approval Request Items**

<b>ISMP Section No./ Title [Rev. 6c Page No.(s)]</b>	<b>Section Topic</b>	<b>Assessment Concern/Proposed Disposition in Early Approval STATUS OF REQUESTED EARLY APPROVAL, BASED ON RESPONSE TO OSR QUESTIONS ON SAP SUBMITTAL</b>
9.0 Scheduling of Safety-Related Activities [ENTIRE CHAPTER]	Scheduling of Activities Related to Safety	<p>Chapter 9 and Figure 9-1 are out of date and do not reflect the current project approach for limited construction authorization request, partial construction authorization request, or phased construction authorization requests. As this information is provided in project detailed schedules, a general reference is made to that source of detailed project planning to direct the ISMP reader to that information.</p> <p><b>Rewording proposed in ISMP SAP.</b></p> <p><b>This topic is addressed by OSR Question 01-ISMP-011; ABCN revision required, Early Approval <u>Not Requested</u> on Radiation Protection Program (RPP) changes associated with this question (Early approval <u>still requested</u> on balance of Chapter 9 proposed changes)</b></p> <p>The ISMP SAP ABCN will need to be updated to reflect RPP activities. Specific to construction, the RPP activities to support construction site monitoring for radiological hazards (e.g., legacy radiological contamination monitoring), as well as protection of construction workers from radiological hazards (e.g., radiography use), will be added to Table 9-2.</p> <p>This proposed AB change will be incorporated in a Revision 1 to ABCN-24590-01-00008. The ISMP Section 9 tables change would be based on subsequent OSR approval of ABCN-24590-01-00008, Revision 1.</p>